



**Connecticut Department of Public Health**

**Testimony Presented Before the Public Health Committee**

**March 14, 2022**

**Commissioner Manisha Juthani, MD  
860-509-7101**

**Senate Bill 367, An Act Concerning Electronic Nicotine Delivery Systems and Vapor Products**

The Department of Public Health (DPH) supports Senate Bill 367, which would prohibit the sale of electronic nicotine delivery systems (ENDS) and vapor products that are flavored or that have a nicotine content that is greater than thirty-five milligrams per milliliter (mg/ml). Thank you for the opportunity to testify on this important issue.

Prohibiting the sale of flavored vapor products will help to reduce youth initiation and continued use of tobacco products. The use of ENDS and vaping products among Connecticut high school students has increased rapidly over the past several years, from 14.7% in 2017 to 27% in 2019. More than one-quarter (27%) of all Connecticut high school students use e-cigarettes and other vaping products. This number increases to 35% for high school seniors. CT high school youth also continue to use other tobacco products: in 2019, 6.6% of high school seniors smoked combustible cigarettes, 6.6% smoked cigars, and 6.6 used hookah.<sup>1</sup> The Centers for Disease Control and Prevention released a report in 2019 that encouraged states to prohibit the sale of flavored tobacco products to stem the increase in youth tobacco use.<sup>2</sup>

Historically, flavoring agents have been added to tobacco products to mask the harsh flavors of tobacco and to attract the interest of young people.<sup>3</sup> The long-term consequences of vaping flavored e-liquids are not yet fully known. Although flavorings have been tested as safe for ingestion, they have not been fully tested for inhalation safety, and studies show that some flavors contain chemicals known to irritate the respiratory system.<sup>4</sup> In the fall of 2019, JUUL Labs, maker of the popular JUUL device, stopped selling their flavored products with the exception of mint/menthol and tobacco flavors.

Although most e-liquids on the market previously contained 36 mg/ml of nicotine or less, with the introduction of JUUL to the market in 2015 and the creation of nicotine salts, ENDS products have become more appealing with continuously increasing levels of nicotine.<sup>5</sup> These levels offer a greater influx of nicotine into a person's system for a given inhalation. Studies have shown that adolescent brains are particularly vulnerable to nicotine and nicotine addiction, and that many young people are not aware that most ENDS contain nicotine. There is a general perception that flavored ENDS products are less harmful than products with tobacco flavors.

Connecticut youth are using ENDS products that are five times more potent than cigarettes. Nicotine is a highly addictive drug that can have lasting damaging effects on adolescent brain development. In particular, nicotine use can harm the parts of the adolescent brain responsible for attention, learning, mood, and impulse control.<sup>7</sup> The U.S. Surgeon General has concluded that "The use of products containing nicotine in any form among youth, including in e-cigarettes, is unsafe."<sup>7</sup>

***Phone: (860) 509-7269***

***410 Capitol Avenue - MS # 13GRE, P.O. Box 340308 Hartford, CT 06134***

***An Equal Opportunity Employer***

Thank you for your consideration of this information. DPH encourages committee members to reach out with any questions.

#### References

1. State of Connecticut, Department of Public Health. Data from the 2017 and 2019 Connecticut Youth Risk Behavior Surveys.
2. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, *"Vital Signs: Tobacco Use by Youth is Rising; E-Cigarettes are the Main Reason"*, February 2019.
3. Department of Health and Human Services, Centers for Disease Control and Prevention *"E-Cigarette Use among Youth and Young Adults: A Report of the Surgeon General"* 2016.
4. Park, et al; ([Harvard T.H. Chan School of Public Health](#)), Scientific Reports; "Transcriptomic response of primary human airway epithelial cells to flavoring chemicals in electronic cigarettes." February 1, 2019; and Tierney, et al; BMJ Journal of Tobacco Control, "Flavor chemicals in electronic cigarette fluids", 2016.
5. Jackler, et al. BMJ Journal of Tobacco Control. *"Nicotine arms race: JUUL and the high-nicotine product market"*, Volume 28, Issue 6. 2019.
6. Department of Health and Human Services, Centers for Disease Control and Prevention *"E-Cigarette Use among Youth and Young Adults: A Report of the Surgeon General"* 2016.
7. Department of Health and Human Services, Centers for Disease Control and Prevention *"E-Cigarette Use among Youth and Young Adults: A Report of the Surgeon General"* 2016.